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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,839	12/15/2004	Young II Park	3449-0418PUS1	9010

2292 7590 11/17/2005

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EXAMINER	
NGUYEN, TRAN N	

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/517,839	PARK, YOUNG II	
	Examiner	Art Unit	
	Tran N. Nguyen	2834	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement filed 12/15/04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-11 and 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over either **JP-12092804 (hereafter JP'804) or JP-14028570 (hereafter JP'570)** in view of **Koyanagi (US 6,765,331).**

Each (JP'804) or (JP'570) individually substantially discloses a flat vibration motor comprising:

an upper case;

a lower case;

a conductive substrate formed on an upper surface of the lower case;

a magnet formed on the upper surface of the lower case, for generating magnetic field;

a conductive brush having an end electrically connected with the substrate;

a rotational shaft supported at an approximate center portion between the lower case and the upper case;

a rotator inserted onto the rotational shaft to rotate and formed of a resin base; a commutator formed on a lower surface of the rotator and connected to the other end of the brush; wherein the coil is fixed to the base; and a weight formed eccentrically inside the rotator, for enhancing eccentricity of weight center of the rotator; and the coil is received inside the base.

Each of the refs, however, does not disclose the limitations of *the a coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator.*

Koyanagi, however, teaches a flat vibration motor comprising a rotator the a coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator (fig 7) for the purpose of providing mechanical support as protection for the coil since the coil is a coreless coil.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the vibration motor by position the coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator, as taught by Koyanagi. Doing so would provide the rotator's coil with mechanical support and protection to improve the structural integrity of the rotator in the rotor.

3. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **(JP'804) or (JP'570) and Koyanagi, further in view of Yamaguchi et al (US 6,359,364).**

The combination of **(JP'804 and Koyanagi) or (JP'570 and Koyanagi)** substantially discloses the claimed invention, except for the limitation of the *power supply means comprises: a conductive terminal formed a lower surface of the lower fixer; and a brush penetrating the lower fixer and having both ends connected to the terminal and the rotator.*

Yamaguchi, however, teaches a flat vibration motor comprising these features (fig 2) for the purpose of there is no deviation when the brushes are installed at the bracket and the supporters can be formed of flexible synthetic resin in order to prevent the brushes from vibrating base of the brush is preferably drawn to the outside and is preferably used as a power supply terminal; therefore, less part counts for the brush and power supply assembly.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the vibration motor by configure the insulating base of the vibration motor housing with a conductive terminal formed a lower surface of the lower fixer; and a brush penetrating the lower fixer and having both ends connected to the terminal and the rotator, as taught by Yamaguchi. Doing so would mechanically improve the power supply assembly and the brush assembly structure relative to the base of the vibration motor so that less part counts resulting in reduction of manufacturing cost.

4. **Claims 13-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **(JP'804) or (JP'570) in view of Koyanagi and Yamaguchi.**

The combination of **(JP'804 and Koyanagi) or (JP'570 and Koyanagi)** substantially discloses the claimed invention, except for the limitations of the following:

(a) the a coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator;

(b) power supply means comprises: a conductive terminal formed a lower surface of the lower fixer; and a brush penetrating the lower fixer and having both ends connected to the terminal and the rotator.

Koyanagi, however, teaches a flat vibration motor comprising a rotator the a coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator (fig 7) for the purpose of providing mechanical support as protection for the coil since the coil is a coreless coil.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the vibration motor by position the coil having an upper end, which is positioned lower than an upper end of the rotator, and the coil is received inside the base so that the coil is not observed at an upper surface of the rotator, as taught by Koyanagi. Doing so would provide the rotator's coil with mechanical support and protection to improve the structural integrity of the rotator in the rotor.

Yamaguchi, however, teaches a flat vibration motor comprising these features (fig 2) for the purpose of there is no deviation when the brushes are installed at the bracket and the supporters can be formed of flexible synthetic resin in order to prevent the brushes from vibrating base of the brush is preferably drawn to the outside and is preferably used as a power supply terminal; therefore, less part counts for the brush and power supply assembly.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the vibration motor by configure the insulating base of the vibration motor housing with a conductive terminal formed a lower surface of the lower fixer; and a brush penetrating the lower fixer and having both ends connected to the terminal and the rotator, as taught by Yamaguchi. Doing so would mechanically improve the power supply assembly and the brush assembly structure relative to the base of the vibration motor so that less part counts resulting in reduction of manufacturing cost.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tran N. Nguyen
Primary Examiner
Art Unit 2834